Safety Advisory Committee
November 19, 2010
10:00 AM – 12:00 PM

Minutes

Committee Member	Representing	Present
Anderson, Erik	Materials Sciences Division	X
Bello, Madelyn	Human Resources Advisor	
Blodgett, Paul M.	Environment, Health and Safety Division	X
Cademartori, Helen	Information Technology Division	X
Carithers, William	Physics Division	X
Christensen, John N.	Earth Sciences Division	X
Earnest, Thomas N.	Physical Biosciences Division	
Floyd, Jim	Safety Advisory Committee Chair	X
Fujikawa, Brian	Nuclear Science Division	X
Ji, Qing	Accelerator & Fusion Research Division	
Lukens Jr., Wayne W.	Chemical Sciences Division	*
Lunden, Melissa	Environmental Energy Technologies Division	X
Mangiardi, Vito J.	Genomics Division	X
Martin, Michael C.	Advanced Light Source Division	X
More, Anil V.	Office of the CFO Advisor	
Taylor, Scott E.	Life Sciences Division	X
Tucker, Eugene	Facilities Division	X
Thomas, Patricia M.	Safety Advisory Committee Secretary	X
Walter, Howard	Computing Sciences Directorate	X
Wong, Weyland	Engineering Division	X

Others Present: Ken Barat, John Chenowski, Richard DeBusk, Joe Dionne, Doug Fleming, Mary Gross, Julie Henderson, Michael Kritscher, Peter Lichty, Scott Robinson, Mike Ruggieri, Bill Wells

Chairman's Comments – Jim Floyd

Meeting schedule – There has been a request to change our meetings to Friday afternoon due to a conflict with a Directorate meeting. The proposed time is 1:30 – 3:00 PM, on the first Friday of each month. We will skip the December meeting.

Hazardous materials transportation

Argonne Lab recently submitted an Occurrence Report because a researcher was found to be carrying 2 vials of samples through an airport. One of the samples was an oxidizer. LBNL submitted a recurring Occurrence Report for hazardous materials transportation issues. The Office of Contract Assurance (OCA), Facilities, and Environmental Health

and Safety (EHS) representatives have prepared a report and submitted it to Jim Krupnick. They recommended 13 corrective actions, including forming a shipping and transportation user group, establishing a single cohesive program and responsible person, revising the websites and forms to make them consistent, developing user training and adding shipping information to the Chemical Hygiene and Safety course, revising the Job Hazards Analysis questionnaire, briefing all EHS Liaisons and Division Safety Coordinators, and requiring Division Safety Coordinators to complete the "point and ship" training.

A division representative reported a recent experience of needing to ship a centrifuge to Excess and having difficulty finding information about what to do. Another example was an attempt to ship a refrigerator. They had to find the right person to get verbal instructions. The process for refrigerators is to send them to Excess, where a contractor will remove the refrigerant. EHS wants to get new people to join the user group, so they can get feedback from people who are trying to find out how the system works. The Point and Ship system was not originally designed for hazardous materials shipments.

There was a question about how to get materials to Bldg. 69. EHS is still looking at it.

Policy Development Process Discussion

Issue CC1 from the Health, Safety, and Security (HSS) audit called for improvement in how EHS programs are developed and rolled out. The new process was rolled out in July, and there will be an effectiveness review in 1 year. The "EHS pipeline" is part of the answer.

Richard DeBusk described how PUB-3000 changes are ranked by significance level 1, 2, or 3, with different levels of review. Most changes are Level 1, minor changes. An example was incorporating Federal OSHA changes into the crane standard that reflect requirements already applicable in California. Another minor change was transferring Subcontractor JHAs from hard copy to a database.

Jim Floyd discusses changes with Doug Fleming monthly.

Mike Wisherop commented that there is a separate "status" database. There have been some requests to add a status column to the "pipeline" report.

Steve Franaszek has built a test website.

Jim Floyd asked whether SAC members would like to be more involved in additional issues.

There were questions about whether the "pipeline" list is comprehensive. There may be some Environmental Management and Emergency Response issues that have not been integrated into the system.

Nancy Rothermich and Richard DeBusk are the project managers. EHS is working on a communications strategy. The latest HSS visit noted the need to improve communications. Doug Fleming requested that communications be an agenda item for the next SAC meeting.

Access Control

Gita Meckel was unable to attend the meeting, so she provided an update to Jim Floyd. The software is four days into the first pilot test. Information Technology is ready to sustain the system. Money has been allocated to install software in radiation areas. There will be a consultant to help develop governance systems, and focus groups are being created.

Howard Walter reported that a new training course has been developed for people working in computer rooms and the requirement was activated on Tuesday. There was a problem with security guards not being able to get in. The lesson is to communicate new access requirements to people outside your Division. There are 5 access groups (grand master, restricted grand master, executive access, etc.). We may need to refine access requirements in a more targeted way. Some areas may need a short course for occasional visitors and a longer course for regular occupants.

The access control system for the 88" Cyclotron will be the next one to be rolled out, after Thanksgiving. The Advanced Light Source will be the next one after that. They are working on figuring out how to link the system to JHA Work Groups to send out messages.

There are questions about who controls the training requirements. EHS manages institutional requirements, and Divisions add their own specific requirements. Some areas have complex systems. We need a single point of ownership for the overall system.

<u>EHS Policy Development – Doug Fleming</u>

EHS is transitioning from putting all requirements in PUB-3000 to a hierarchical system of policies, procedures, and work instructions. The will allow better change management and communication. The next step is to identify the right people to work on the system. There will be searchable title pages with 1-paragraph descriptions. Lydia Young in Howard Hatayama's group is working on it.

EHS is also working on developing more leading indicator performance metrics. There will be an off-site meeting in December where they will define key metrics for the Lab, for Divisions, and for EHS. There will be an on-line dashboard to display performance status.

Electrical Safety HSS Assist Visit – Doug Fleming

The HSS assist visit with Berkeley Site Office (BSO) was a positive experience. The contractor Lockout/Tagout (LOTO) process was reviewed.

Facilities had a safety stand-down yesterday. There was another violation – a contractor did not apply his lock or wait for the Construction Manager's approval before beginning work. The stand-down meeting involved Lab management, construction management, BSO, and the contractors. Paul Alivisatos spoke about his concern. There was an hour of discussion about possible causal factors, which stimulated additional conversation after the meeting about why people are not following the procedures. In this incident, a new subcontractor came to perform a brief job of putting a chain on a door opener, and he was in a hurry to get the work done. LBNL is working with contractors and subcontractors to develop solutions. There is no parking control at offsite facilities so it is difficult to control or monitor subcontractor access. In most cases, LBNL is just enforcing basic OSHA rules, but many other projects do not enforce the rules. Federal procurement rules require us to seek "best value" which is not always the lowest bidder. We need to hold subcontractors accountable for their safety performance.

HSS found that LBNL needs to do a better job of capturing and analyzing incidents that do not rise to the level of an Occurrence Report, such as small spills and near hits. There are questions about how low should be go. We need to capture an incident if we can learn from it. The investigation needs to be a positive experience to the people who report the incident. Scientific staff is concerned about increased requirements. The Occurrence Reporting and Processing System (ORPS) is time-consuming. We need to develop a more efficient tool to enter small incidents. ALS and the Molecular Foundry have requirements to notify the DOE Program Office of all incidents. The Joint Genome Institute (JGI) has a safety blog that requires safety staff to respond to reported incidents and concerns. There is a cultural barrier for researchers from some countries who have been taught not to complain about things. LBNL will look at what other sites are doing. We need to compare the cost and benefits of reporting. Mary Gross commented that LBNL could report fewer issues under ORPS if we have a more robust issues management system to handle management concerns. There was a suggestion that the incident reporting system include a flow chart of questions to guide people reporting incidents. We need to look at extent of conditions. EHS wants to work on this issue in early 2011.

An electrical work and LOTO authorization system is being pilot tested at ALS, NERSC and JGI. JGI used the system right away when they had an equipment breakdown in urgent need of repair. The "qual card" process is not finished yet. Engineering supervisors are getting started on it. Robert Candelario is scheduling the authorizations. There will be a report on the progress next month.

Safety Culture – Jim Floyd

There was a good response rate (1,950 people, 51% of career employee population) to the safety culture survey, in spite of problems with the link from the email to the survey. There were about 15-25 email comments received. Some people were uncomfortable with stating their impressions of what other people might think about safety, so an "I don't know" response was added. There were questions about how the questions applied to LBNL. Town Hall meetings helped improve response for some Divisions. The Safety Culture team responded promptly to questions and complaints, and explained that we want to be able to compare LBNL to other organizations that have taken the survey. The DuPont consultants will generate a report soon. SAC will devote a meeting to analyzing the results and discussing what it means. The information will be grouped by Division, location, and general work category. We will be looking at the Lab as a whole first. Divisions should not leap ahead and start developing their own corrective actions.

Laser Incident Response Plan – Ken Barat

The Laser Safety Subcommittee is developing an action plan to respond to laser safety incidents as an alternative to defaulting to an immediate shutdown of all laser work. They are asking for approval to the concept of having a plan. Jim Floyd, Mike Carr, and David Littlejohn will review the details. The process will determine root causes and extent of condition and communicate lessons learned. An immediate shutdown has been the traditional response to laser safety incidents. Other Labs have found that researchers' bitterness about shutdowns can hinder their participation in an effective response. Stanford Linear Accelerator Center (SLAC) found that announcing a restart plan and criteria at the beginning of their shutdown increased researcher cooperation.

Peter Lichty commented that a restart plan was a great idea. He suggested developing scenarios for different types of incidents.

The Office of Contract Assurance and internal and external Subject Matter Experts would review proposed corrective actions. SLAC found they had to wait two weeks for an investigation team from Washington, D.C. to be available.

Scott Taylor commented that he would like SAC to review the final plan.

There were questions about whether other laser users would be at risk during an investigation. This would depend on whether the cause is a hardware problem that might affect similar systems or a unique human performance issue. We would need to perform a self-assessment to look at the likelihood that other labs share common conditions. SLAC announced a shutdown within 24 hours of their incident because their management felt pressure to take an action comparable to historic responses. A plan would guide a rational, systematic approach to responding to incidents.

There were no objections to moving forward with developing the plan.

Issues Management – John Chernowski

The HSS review found that LBNL needs to improve our process for performing causal analysis and developing and implementing effective corrective actions. The Issues Management Program Manual (PUB-5519) has been revised. There is a new on-line training class on how to develop effective corrective actions. It is available through the CATS database, Office of Contract Assurance (OCA) website and the Berkeley Lab Institute website. Bob Compton of HSS reviewed the training and commented that he liked it.

A group of designated Root Cause Analysts has been identified and is being trained for performing formal root causal analyses. A formal causal analysis process requires line management ownership, independent analysis, subject matter expertise, and a trained analyst. Sometimes one person can fill more than one of these roles. The Office of Contract Assurance benchmarked against 5 other Labs and met with Division management to develop the system. The causal analysts are being trained in several methodologies, including TapRoot, 5-Whys, Barrier Analysis, and Human Performance Improvement. The analysts are required to participate in at least one review before leading a review. The training can be offered to other interested people. OCA is also developing a shorter apparent causal analysis class.

Peter Lichty commented that he has seen some poorly developed corrective actions in supervisor injury/ accident reports. He would like to see a review process for draft causal analysis reports. John Chernowski responded that draft formal root causal analysis reports are provided to responsible line management for factual accuracy review. Too many reviewers can delay reports, which can also be a problem.

The meeting was adjourned at 12:00 PM
Respectfully submitted, Patricia M. Thomas, SAC Secretary